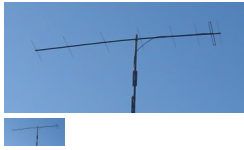


8el 144-145MHz Yagi OWL-Ultra Super low noise Yagi



8el OWL Ultra - 144-145MHz for super low noise Yagi for weak signal operation

Rating: Not Rated Yet

Price

Sales price £169.95

Sales price without tax £141.63

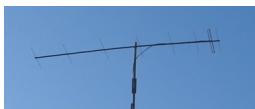
[Ask a question about this product](#)

Manufacturer [InnovAntennas](#)

Description

An 8 element OWL-Ultra (4.2m long) Super low noise, light weight Yagi 144-145MHz Optimised for weak signal (EME) operation - New 2020 Model!

X-pol available upon request & full EME system prices available upon request - This email address is being protected from spambots. You need JavaScript enabled to view it. `document.getElementById('cloakbd80d0193ebbf32359909af579efbd0').innerHTML = '';` var prefix = 'ma' + 'il' + 'to'; var path = 'hr' + 'ef' + '='; var addybd80d0193ebbf32359909af579efbd0 = 'sales' + '@'; addybd80d0193ebbf32359909af579efbd0 = addybd80d0193ebbf32359909af579efbd0 + 'innovantennas' + '.' + 'com?subject=9el%20OWL%20Ultra%20EME%20or%20X-pol%20pricing'; var addy_textbd80d0193ebbf32359909af579efbd0 = 'Email us for pricing'; document.getElementById('cloakbd80d0193ebbf32359909af579efbd0').innerHTML += '+addy_textbd80d0193ebbf32359909af579efbd0+';



A 8el 144MHz OWL Ultra installed and ready for action

Fully customisable design - what you want, we will make

If you require a **larger diameter boom**, rear mount, **X-pol**, a variation in frequency coverage or other variation, contact This email address is being protected from spambots. You need JavaScript enabled to view it.

`document.getElementById('cloak57a92715b522b0c4d74724aea0e44259').innerHTML = '';` var prefix = 'ma' + 'il' + 'to'; var path = 'hr' + 'ef' + '='; var addy57a92715b522b0c4d74724aea0e44259 = 'sales' + '@'; addy57a92715b522b0c4d74724aea0e44259 = addy57a92715b522b0c4d74724aea0e44259 + 'innovantennas' + '.' + 'com'; var addy_text57a92715b522b0c4d74724aea0e44259 = 'sales' + '@' + 'innovantennas' + '.' + 'com'; document.getElementById('cloak57a92715b522b0c4d74724aea0e44259').innerHTML += '+addy_text57a92715b522b0c4d74724aea0e44259+'; [detailing your requirement for a custom quote.](#)

The very latest G0KSC desgins

The G0KSC OWL Ultra is another fantastic design by G0KSC. A low impedance Yagi provides excellent performance. However, traditionally, low impedance has meant narrow bandwidth.

G0KSC developed the OWL (**O**ptimised **W**ideband **L**ow impedance **Y**agi) with a folded dipole driven element which this has increased the feed point from 12.5 Ω impedance to 50 Ω . This along with careful, long duration computer optimisation has resulted in a much wider bandwidth than

previously seen in native low impedance Yagis.

THE Low Noise Yagi dubbed the 'Urban Yagi'

The super low noise characteristics of the OWL Ultra mean you can HEAR as well as be heard in today's modern and very noisy city environments. If you want the very best option for minimal noise pick-up in Urban and city locations, the OWL Ultra is for you.

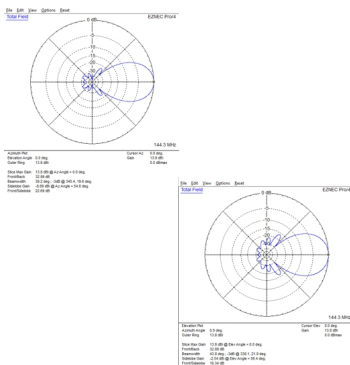
Best in Class performance in terms of G/T

All of the InnovAntennas OWL and LFA models for 2020 show better G/T (Gain over Temperature, an antennas ability to receive weak signals) than any traditional dipole fed Yagi of the same or smaller size. Check the VE7BQH list for confirmation.

Model	Gain	SWR	VSWR	Return Loss	Reflection Coef	Reflection Loss	Loss	Gain	SWR	VSWR	Return Loss	Reflection Coef	Reflection Loss	Loss	Gain	SWR	VSWR	Return Loss	Reflection Coef	Reflection Loss	Loss	Gain	SWR	VSWR	Return Loss	Reflection Coef	Reflection Loss	Loss
8el OWL Ultra	14.5	1.1	1.1	20	-0.1	0.01	0.01	14.5	1.1	1.1	20	-0.1	0.01	0.01	14.5	1.1	1.1	20	-0.1	0.01	0.01	14.5	1.1	1.1	20	-0.1	0.01	0.01
8el Yagi	13.5	1.2	1.2	18	-0.15	0.02	0.02	13.5	1.2	1.2	18	-0.15	0.02	0.02	13.5	1.2	1.2	18	-0.15	0.02	0.02	13.5	1.2	1.2	18	-0.15	0.02	0.02

Note: the more positive the number in the blue column (G/T), the better the antennas G/T performance (ability to receive weak signals). Note the large gap in G/T between the 8el OWL Ultra and all Yagis either side of it. Exert from VE7BQH list of 6th December 2019, unedited.

Polar plots of a single 8el OWL Ultra in free space and 10m above ground (including ground gain)



Above, Azimuth and elevation plots of a single 8el OWL Ultra on 144.3MHz. Note how tight the rear lobes are. Below elevation plot @ 10m above ground with ground reflections and ground gain.



Above - 8el OWL Ultra 10m above ground.

Excellent wet weather performance

The OWL Ultra is usable in all weathers. Unlike some antennas that shift frequency and become unusable when wet, the OWL Ultra remains perfectly usable.

Latest and best G0KSC designs only available through InnovAntennas

The OWL-Ultra is the latest, 3rd generation OWL and provides G/T performance not seen at this boom length previously (VE7BQH independant comparison list). **The latest G0KSC designs are ONLY available through InnovAntennas.**

Elevation lobe suppression is key

One of the reasons the OWL Ultra performance is better than other Yagis of the same size is the special attention paid to elevation lobes during the optimisation process. Whether you believe you live in a quiet location or not, elevation lobes will ensure your received noise floor is higher than it would otherwise be if they were greatly suppressed. Even if you have a shack in the middle of open countryside, if your shack is directly below the antenna or in view of the antenna in certain directions, noise from everything in the shack (from computers, modems, LED lamps, alarms WiFi adapters etc.) will increas your noise floor. The highly suppressed elevation lobes of the OWL Ultra will ensure your noise floor is as low as possible.

Mechanical design

The new OWL Ultra is designed in a light weight and very strong package with this particular model using a **3/4" square boom** with through boom (insulated) **1/4" solid rod elements**. The driven loop is adjustable in order to ensure absolute minimum return loss figures can be seen and is made from **1/2" tube with 3/8" diameter loop ends** which trombone to provide the finalisation tuning ability. The folded dipole is through the boom as are the parasitic elements although the section of loop opposite the feed point is grounded to help reduce noise and to help protect the receiver front-end against static. Grounding the loop in this way also provides a band pass filter characteristic. The feed impedance goes very high quickly once moving away from the 2m ham band and this results in a filter property being added to the antenna for out-of-band signals, received or transmitted.

G0KSC variable element correction applied

SWR characteristics are unparalleled as a result of the applying of G0KSC variable, percentage based correction to all through boom elements. Fixed length element correction does not match software models precisely. The correct method is to apply a % to the elements which vary greatly between the first (reflector) and last (final director) elements. However, an added complication is that the first and last few elements at either end of the boom, require less correction than those centrally mounted on the boom. Don't worry, all these correction issues are taken care of by G0KSC during the design and testing process.

Other benefits include:

- **Marine grade stainless steel fittings**
- **Super-light but rigid construction**
- **Mill finished boom and elements for highest levels of accuracy**
- **Unparalleled after-sales support and assistance when needed**

For more information [Email Here](#)

Performance

Gain: 13.8dBi @ 144.3MHz

F/B: 32.89dB @ 144.3MHz

Peak Gain: 13.89dBi

Gain 10m above ground: 19.64dBi

Peak F/B: 33.31dB

Power Rating: 5kw

SWR: Below 1.2:1 from 143.8MHz to 145.2MHz

Boom Length: 4.2m

Weight: 2.1kg/4.5lbs

Safe Wind Speed: 160Kph/100Mph

Turning Radius: 2.334m/7.7ft

Vertical Stacking: Between 2.1m and 2.6m for minimum under-lobes

Units in box: 1